WAIS to Improve Your Internet Search

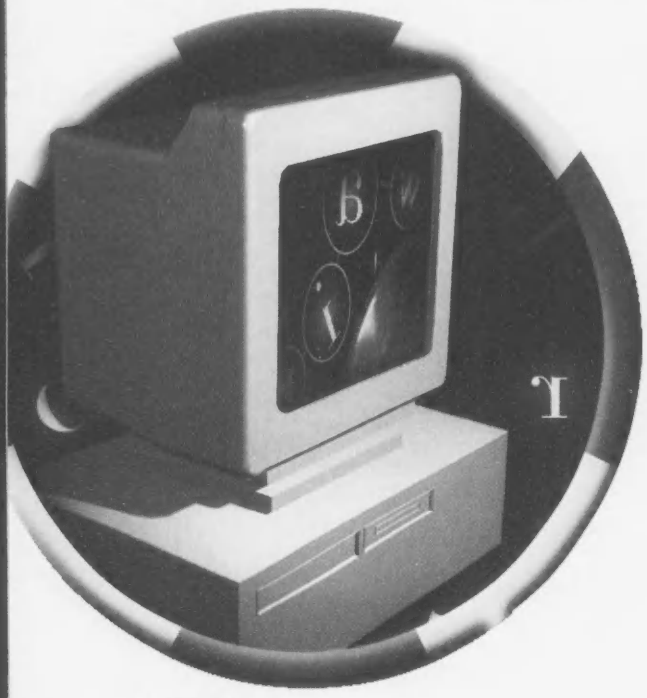
Illustration: Chris Lensch

Search the Internet's vast library with WAIS.

By Kevin M. Savetz

The Wide Area Information Server or WAIS (pronounced "ways" or "wase") can be thought of as an oft-ignored child, the highly intelligent but unsightly idiot savant of the Internet. While many longtime Internet users don't comprehend WAIS, most Internet users have never even heard of it.

Though it's not widely known or used, WAIS can be a valuable Internet search tool. But to use it, you need patience as well as experience because WAIS can be challenging to navigate.



All About WAIS

WAIS is a text-searching system that searches through Internet archives looking for articles that contain words or groups of words. By typing in keywords or phrases, you can search indexed databases from various servers to obtain a list of online files that contain that word or phrase.

The main difference between WAIS and other Internet search tools is its ability to search through the text of documents and groups of files rather than just titles of documents (like veronica) and names of files (like archie). In addition, you can actually communicate your WAIS search request in plain English. For example, instead of using odd queries like "alice AND [Ww]onderland NOT cheshire -t3," you can ask WAIS: "Tell me about the rabbit in Alice in Wonderland."

Another advantage to WAIS is that, although it's capable of fairly powerful and sophisticated searches, it requires remarkably little computer power on the client or user end.

Here are several public WAIS servers to which you can telnet:

wais.com (login: wais)

quake.think.com (login: wais)

sunsite.unc.edu (login: swais)

sunsite.unc.edu (login: politics) *political database only*

cnidr.org (login: demo)

info.funet.fi (login: wais)

You'll find hundreds of "WAISed" information collections available on the Internet, from lists of Usenet newsgroups to scientific and government databases to books and archives of Internet mailing lists. WAIS databases cover topics of endless variety, including literature, religion, social science, botany, computers, political speeches, recipes, science fiction and many, many more. These databases come and go; hence, the sequence or numbers of the databases change as well. All of the databases, which are stored on many different computers around the globe, are free to access.

Problems With WAIS

Although WAIS searches the content of documents, not just menus and document titles, it doesn't actually search through human-readable text files; instead, it searches a prebuilt index for relevant words. Therefore, WAIS is dependent on the quality of the indices it is searching. If the index is out of date, your search will be less than useful.

WAIS is also complicated to use. At times, users may feel lost because of a lack of direction on-screen and the fact that there's not much rhyme or reason to command codes. There is also a notable lack of documentation. For instance, there is not a frequently asked questions file or a beginner's guide. Also, the online documentation to the telnetable WAIS client is abysmal.

Another problem with WAIS is that its servers are occasionally down, which means you have to delay your search for a few hours or, sometimes, a few days.

To make matters worse, you actually need to conduct two searches to find what you're looking for on WAIS. First you need to find the right databases to search. (There were about 550 databases on one server the last time I checked.) Then you actually do the search. Finding relevant databases, with names like "wu-wien-phonebk" and "IUBio-fkystock-um," can be difficult.

Learning Your WAIS Around

There are several ways to access WAIS, all of which require a computer running a WAIS client program. Telneting to a public WAIS client is probably the easiest way to search. This is the method we will use in our sample search later in this article.

Gophering to a WAIS server is also a fairly easy way to search because you can access WAIS right from gopher's familiar menus. To do this, look for the menu item Other Gopher and Information Servers and then WAIS-Based Information. The disadvantage to this method is that you can only search one database source at a time.

If your computer is set up for it, you may also access WAIS through a local client program like *MacWAIS* or *HyperWAIS*, both shareware. These client programs can provide you with an elegant graphical interface, but they may require a SLIP or PPP connection to the Internet.

You also can access WAIS databases through WAIS Inc.'s Web site (**http://www.wais.com**). Creator of WAIS and dis-

tributor of WAIS freeware, WAIS Inc. now develops and markets the WAISserver and creates custom online services for publishers using WAIS technology.

Telneting to a Public WAIS Server

Because of WAIS' many databases (and their obscure names), the trick to a successful WAIS search is to start by searching the database called directory-of-servers. This database can help you find other databases that will be relevant to your search. Another less popular and more time consuming way to search for databases relevant to your topic is to use the hunt-and-peck method. We'll try both in the sample search for poetry, specifically about the works of poet e.e. cummings. For this search, we'll try telneting to public WAIS server **wais.com**.

Logging in Log in as **wais**. The server will ask for your e-mail address and terminal type. (You can simply hit return at both of these prompts if you wish.) After logging in, there will be a brief pause while WAIS pulls up its long list of databases.

Part I

Searching the Directory-of-Servers The fastest way to search for databases relevant to your topic is to search the directory-of-servers database. To get there from the Search Selection menu, type /. At the source name prompt, type **directory-of-servers** and hit enter. This will take you to the list that includes the directory-of-servers database; select it by pressing the space bar. (This tells WAIS that you want to search the database.) An asterisk will appear next to the name of the database after you've selected it. Press return to begin the search.

Now you're in the directory-of-servers database, ready to search for databases on your topic. For this example, type in **poetry** and hit return at the keyword prompt. The trick here is to use general phrases to find the right databases, which is why we chose the keyword **poetry** rather than the keyword **cummings**. You can use any combination of words; the order doesn't matter. WAIS now begins the search for indexed databases that contain information about poetry.

After the search is complete, the Search Results page will come up on screen. In our case, WAIS found two databases about poetry: POETRY-index and Poetry. Now we have a place to start our search for poems by e.e. cummings. Go back to the main listing of databases at the Source Selection page. To get there, type **s**.

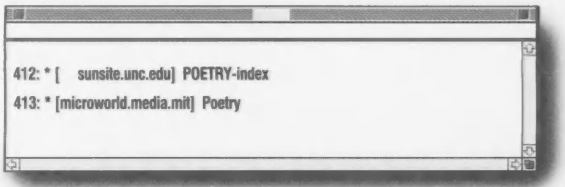
Searching by Hunt-and-Peck An alternative to searching the directory-of-servers for relevant databases is to use the hunt-and-peck method. To do this, scroll through the list of databases on the far right column of your Search Selection menu with your arrow keys, looking for names of databases that sound relevant to your topic. (The list starts with database names that contain numbers and is arranged alphabetically after that.)

Because there are so many databases, scrolling through them takes awhile, especially if you're searching for a topic that falls at the end of the alphabetical list, like whales.

Another problem with this method is that it's often hard to tell what type of information each database holds since the names of the databases are less than descriptive. Therefore, this is a less popular way to search.

001: [wais.access.gpo.gov] 103_cong_bills
002: [wais.access.gpo.gov] 104_cong_bills
003: [wais.access.gpo.gov] 1992_cri
004: [wais.access.gpo.gov] 1993_cri
005: [wais.access.gpo.gov] 1994_cri
006: [wais.access.gpo.gov] 1994_hob
007: [wais.access.gpo.gov] 1994_record
008: [wais.access.gpo.gov] 1994_register
009: [wais.access.gpo.gov] 1994_unified_agenda
010: [wais.access.gpo.gov] 1995_cri
011: [wais.acccess.gpo.gov] 1995_hob
012: [wais.access.gpo.gov] 1995_record

*Here is an example of what will typically appear on-screen after logging into WAIS server **wais.com**. Known as the Search Selection menu, this screen displays a list of WAIS databases, with the number of each database in the far left column and the name of each database in the far right column.*

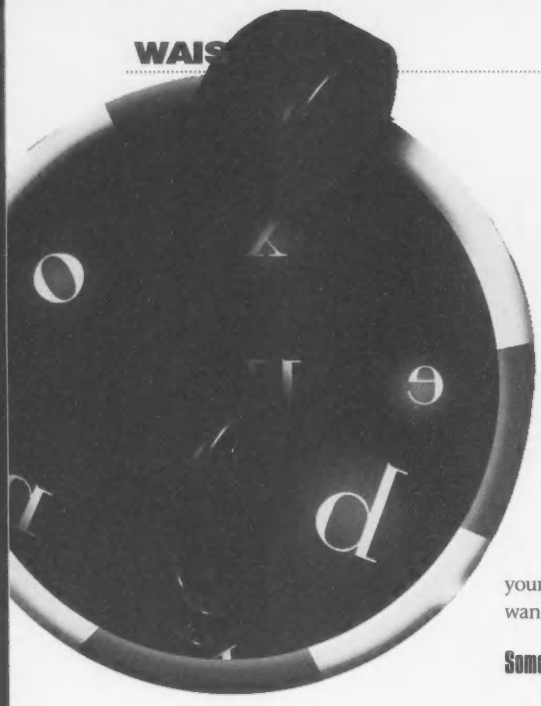


*The first (and sometimes hardest) part of a WAIS search is finding the right sources—indexed databases that contain information about your topic—to search. POETRY-index and Poetry are the two databases that WAIS pulled up under the keyword **poetry**.*

Part II

Searching the Relevant Databases Whether you search by hunt-and-peck or by the directory-of-servers, once you have found what you think are the databases relevant to your topic, select them. To do this, go back to the Source Selection page (type /). At the source name prompt, enter the name of the database you wish to search. (If you wrote down the number of the database, you can also jump directly to it. Don't type the / first.) Regardless of how you get there, once you're in your desired database, select it by hitting the space bar. You can search multiple databases at once, so, for our purposes, select both Poetry and POETRY-index. Press return to begin the search. At the keyword prompt, enter a specific keyword or phrase (**cummings**) and hit enter.

Search Results We're rewarded with five hits. As you can see, the first five lines are articles by or about e.e. cummings. All five hits are from the Poetry database. The other database, POETRY-index, was no help. (See above line 006: Search produced no result.) To view or select one of these poems, use



#	Score	Source	Title	Lines
001:	[1000] (	POETRY)	ee cummings' ghost Jane Roberts	
002:	[577] (	POETRY)	An untitled poem by e. e. cummings	25
003:	[577] (	POETRY)	An untitled poem by e. e. cummings	22
004:	[577] (	POETRY)	An untitled poem by e. e. cummings	27
005:	[577] (	POETRY)	An untitled poem by e. e. cummings	27
006:	[0]	(POETRY-index)	Search produced no result.	

Here are the results of our search for poetry by e.e. cummings. The Poetry database was helpful, but the POETRY-index database was not.

your arrow key to highlight the one you want. Then hit any key to retrieve it.

Some Helpful Hints

Although these steps may sound easy, there are potential glitches. First, WAIS reveals very little about its capabilities and presents the user with limited options and instructions for getting around. Therefore, it's easy to get stuck. However, you will find a list of commands in the Help menu; type ? to check it out.

Also, if you make a mistake while typing in phrases or keywords, you can hit the Delete key or the Back Space key to start over. Two other commands that you'll find helpful are Ctrl U, which deletes a whole line, as well as Ctrl C, which cancels a command.

It's true that finding the right databases to search can be a laborious process, but WAIS' ability to search the full text of documents makes it worthwhile. Let's hope, however, that the next generation of WAIS will be easier on its users. OA

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Here are a few ways to access information about WAIS:

- **Ftp to sunsite.unc.edu and go to the directory /pub/wais/documents.**
- **Check out newsgroup comp.infosystems.wais.**
- **Subscribe to an electronic mailing list for discussions about WAIS. To do this, send e-mail to WAIS-discussion-request@think.com with a message body of "subscribe WAIS discussion."**

COMPUBASE BBS

24 High Speed 28.8 bps V.34 Lines (1200-28800 bps support)
Live Online Chat - Multiline and Sexy Adult Chat!
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